

Abstract

An aqueous chemical mechanical planarizing composition includes an oxidizer for promoting barrier removal and an abrasive. Inhibitor decreases removals of a metal interconnect. The composition has a carboxylic acid polymer having at least one repeat unit of the polymer comprising at least two carboxylic acid functionalities, a pH of less than or equal to 4 and a tantalum nitride removal rate of at least eighty percent of copper removal rate at a pad pressure of 13.8 kPa.